
Page 1

Accept

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the work.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete them.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress to ensure that the objectives are being met.

5. The final step is to evaluate the results of the project. This involves assessing the effectiveness of the plan and identifying any areas for improvement or further action.

Setup Start

Stop

[illegible]**Cust Item ID:**

| | |
|--|------------|
| | (b) (6) |
| | (b) (7)(C) |

Customer:

Reference:

Process Plan:

Date: 1-05-26

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Insp. Stamp

Draw Nbr

Revision Nbr

D3282

Rev C

100

0.00

Skidtubes

Skidtubes

0.00

Skidtubes

Memo

- 1-Cut to length as per Dwg D3282.
- 2- inspect for surface damage as per QSI0018
- 3- Deburr

0.005

HAAS CNC VERTICAL MACHINING #1

0.00

HAAS 1

Memo

HAAS CNC vertical machine #1

1-Machine as per Folio FA579 & Dwg D3282
2-Deburr

0.00

QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

Quality Control

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 70050

Thursday, May 26, 2011 7:49:24 AM



Page 2

Item ID: D3282-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Float Web (206L/407)

Start Date: 5/26/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00

SL 11-08-29



QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

SAD K-09-13



HandFinish

Memo

0.00

Hand Finishing



150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

10 0 BE 11/09/14

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 70050

Thursday, May 26, 2011 7:49:24 AM

Page 3

Item ID: D3282-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Float Web (206L/407)

Start Date: 5/26/2011 Start Qty: 10.00

Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 10.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start




QC:

Date:

SPC (Y/N):

Date:

Stop

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | *Reject Number | Insp. Stamp |
|---|--|----------------------|---------|--------|--------------|---------------|---------------|-------------------|----------------|
| 160  Skidtubes | Skidtubes | 0.00 | | | | | | | |
| Skidtubes | Memo | 0.00 | | | | | | | |
| Skidtubes | 1-Install doublers as per Dwg D3282. Apply LPS-3 between doublers and web A/RN/ALPS-3 <u>VL6551</u> | | | | | | | | |
| 170  QC | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| Quality Control | Memo | 0.00 | | | | | | | |
| 180  Packaging | Identify as per dwg & Stock Location: <u>LC</u> | 0.00 | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries



Work Order ID 70050


Thursday, May 26, 2011 7:49:25 AM

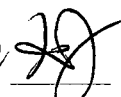


Page 4

Item ID: D3282-041 Accept  Setup Start 
Revision ID: Stop 
Item Name: Float Web (206L/407)
Start Date: 5/26/2011 Start Qty: 10.00  Cust Item ID:
Required Date: 6/23/2011 Req'd Qty: 10.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 190  | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| QC Quality Control | Memo | 0.00 | | | | | | | |

11/9/19 
MK 11-09-19

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Thursday, May 26, 2011 7:49:32 AM

Work Order ID: 70050

Parent Item: D3282-041

Parent Item Name: Float Web (206L/407)



Start Date: 5/26/2011

Required Date: 6/23/2011

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:B 05.09.23 Procedure change KJ/JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

| | | | | | | | | | | | | | |
|--------------|--|-----------|----|--|--|-----|------|-----------|----|-----|--|--|--|
| MS20470AD4-7 | | Purchased | No | | | 100 | Each | 1,872.000 | 57 | 570 | | | |
|--------------|--|-----------|----|--|--|-----|------|-----------|----|-----|--|--|--|



Rivet, Universal Head

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
|----------|---------|----------|

| | | |
|--------|------|--|
| ST320 | 1872 | |
| 116081 | 572 | |
| 117423 | 1300 | |

| | | | | | | | | | | | | | |
|-----------|--|--------------|----|--|--|-----|------|---------|---|----|--|--|--|
| D2792-130 | | Manufactured | No | | | 160 | Each | 19.0000 | 1 | 10 | | | |
|-----------|--|--------------|----|--|--|-----|------|---------|---|----|--|--|--|



EXTRUSION

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
|----------|---------|----------|

| | | |
|-------|----|--|
| HALL | 19 | |
| 61630 | 19 | |

| | | | | | | | | | | | | | |
|---------|--|--------------|----|--|--|-----|------|---------|---|----|--|--|--|
| D3283-1 | | Manufactured | No | | | 160 | Each | 55.0000 | 2 | 20 | | | |
|---------|--|--------------|----|--|--|-----|------|---------|---|----|--|--|--|



Doubler

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
|----------|---------|----------|

| | | |
|-------|----|--|
| ST045 | 29 | |
| 66947 | 29 | |
| ST048 | 26 | |
| 66553 | 26 | |

SAD 11-09-16

461

1009

Ob
n/05/31

10

SAD 11-09-16

20

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

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|-------------------------------|---------------|---------------------|-----------|
| DART AEROSPACE LTD | | Work Order: | 70050 |
| Description: Float Web | | Part Number: | D3282-041 |
| Inspection Dwg: D3282 | Rev: C | Page 1 of 1 | |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|-----------|------------------|--------|--------|----------------------|----------|
| 126.6 | +/-0.100 | 126.6 | | | | |
| 1.500 | +/-0.010 | 1.500 | | | | |
| 3.000 | +/-0.010 | 3.000 | | | | |
| 6.000 | +/-0.010 | 6.000 | | | | |
| 1.250 | +/-0.010 | 1.250 | | | | |
| 30.000 | +/-0.010 | 30.000 | | | | |
| 1.500 | +/-0.010 | 1.500 | | | | |
| 72.01 | +/-0.030 | 72.01 | | | | |
| 61.75 | +/-0.030 | 61.75 | | | | |
| 57.50 | +/-0.030 | 57.500 | | | | |
| 49.19 | +/-0.030 | 49.188 | | | | |
| 43.94 | +/-0.030 | 43.937 | | | | |
| 39.69 | +/-0.030 | 39.687 | | | | |
| 26.68 | +/-0.030 | 26.687 | | | | |
| 0.55 | +/-0.030 | .550 | | | | |
| 1.970 | +/-0.010 | 1.974 | | | | |
| 2.38 | +/-0.030 | 2.378 | | | | |
| 0.05 | +/-0.030 | .048 | | | | |
| | | | | | | |
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|--------------------------|-------------------------|----------------------------|-----|
| Measured by: J.K. | Audited by: J.K. | Prototype Approval: | N/A |
| Date: 11/08/24 | Date: 11-08-29 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------|------------|----------|
| A | 07.04.02 | New Issue | KJ/JLM | |

Same as previous batch.

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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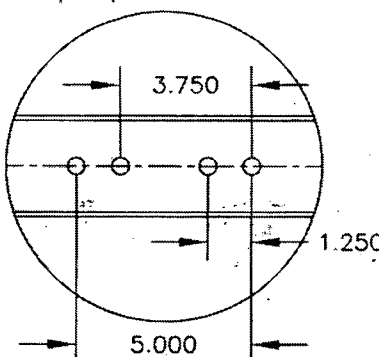
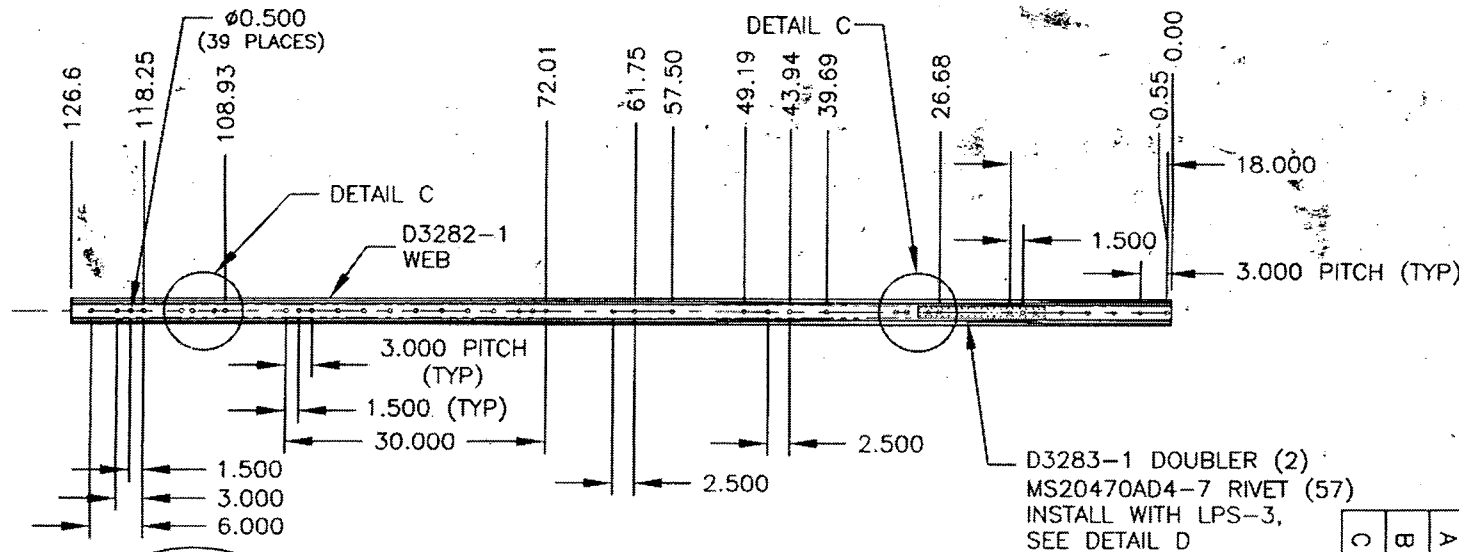
NOTE: Date & initial all entries

DART
 S. O. P. COPY
 R. E. P. TO
 E. N. G. I. N. E. E. R. I. N. G.
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT

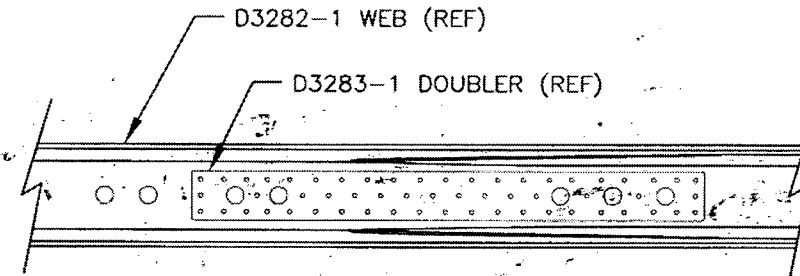
WITHOUT NOTICE
 WORK ORDER
 NO. 70050

05-08-09

| DESIGN | DRAWN BY | TITLE | REV. C |
|----------|----------|----------------------------------|--------|
| CP | CP | DART AEROSPACE USA, INC. | |
| CHECKED | APPROVED | DRAWING NO. | |
| # | # | D3282 | |
| DATE | | SCALE | |
| 05.08.09 | | 1:20 | |
| A | 04.05.05 | NEW ISSUE | |
| B | 05.03.16 | MOVE HOLES, ADD D3390-1 DOUBLERS | |
| C | 05.08.09 | REMOVE D3390-1, NOW MACHINED | |



DETAIL C
 SCALE 1:5
 RIVET HOLES NOT SHOWN
 FOR CLARITY



DETAIL D
 SCALE 1:5

RELEASED
 05-09-12

D3282-041 FLOAT WEB

- 1) MAKE FROM D2792-130 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 5) APPLY A LAYER OF LPS LABORATORIES' LPS-3 BETWEEN D3283-1 DOUBLERS AND D3282-1 WEB. INSTALL RIVETS COATED WITH LPS-3
- 6) SEE PAGE 2 FOR MACHINING DETAILS

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries



| | | | | |
|---------|--------------------|----------|--------------------|--------------------------|
| DESIGN | CP | DRAWN BY | CP | DART AEROSPACE USA, INC. |
| CHECKED | <i>[Signature]</i> | APPROVED | <i>[Signature]</i> | PORT HADLOCK, WA |
| DATE | 05.08.09 | TITLE | D3282 | REV. C |
| | | | 05.08.09 | SHEET 2 OF 2 |
| | | | | SCALE |
| | | | | 1:20 |

RELEASED
05.08.09

SECTION B-B

D3283-1
DOUBLER
(REF)

1.970
(REF)

D2792-130
EXTRUSION
(REF)

SECTION A-A

R0.250
(TYP)

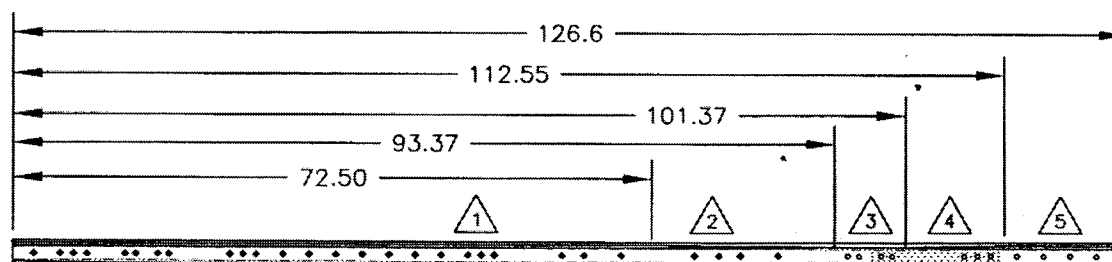
0.05
(TYP)

2.38

D2792-130
EXTRUSION
(REF)

D3282-1 MACHINING NOTES

- 1 UNIFORM SECTION A-A
- 2 UNIFORM TAPER FROM SECTION A-A TO SECTION B-B
- 3 UNIFORM SECTION B-B
- 4 UNIFORM TAPER FROM SECTION B-B TO SECTION A-A
- 4 DRILL #30 ($\phi 0.128$ REF) HOLES (57 PLACES) TO LINE UP WITH D3283-1, SEE DETAIL D FOR REFERENCE
- 5 UNIFORM SECTION A-A
- 6 R1.00 BETWEEN SECTIONS



Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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NOTE: Date & initial all entries